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THE
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MAGAZINE



WASHINGTON
PUBLISHED BY THE NATIONAL GEOGRAPHIC SOCIETY
REPRINT

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THE
NATIONAL
GEOGRAPHIC MAGAZINE

VOLUME IV, 1892

W J McGEE, *Chairman*

HERBERT G. OGDEN

C. HART MERRIAM

Publication Committee



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PUBLISHED BY THE NATIONAL GEOGRAPHIC SOCIETY

1893

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1892

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PUBLICATIONS OF THE NATIONAL GEOGRAPHIC SOCIETY

REGULAR PUBLICATIONS

In addition to announcements of meetings and various circulars sent to members from time to time, the Society issues a single serial publication entitled *THE NATIONAL GEOGRAPHIC MAGAZINE*. During the first two years of the existence of the Society this serial was issued in quarterly numbers. With the beginning of the third year of the Society and the third volume of the *MAGAZINE* the form of publication was changed, and the serial now appears at irregular intervals in parts or brochures (designated by pages and designed either for separate preservation or for gathering into volumes) which consist either of single memoirs or of magazine brochures made up of articles, notes, abstracts and other geographic matter, together with the Proceedings and other administrative records of the Society.

The *Magazine* is mailed free to members of the Society and to exchanges. The first three volumes, as well as the separate brochures of the fourth and the complete volume, are sold at the prices given below by the Secretary, Mr F. H. Newell, U. S. Geological Survey, Washington, D. C.

	To Members.	To the Public.
Volume I, 1889: 4 numbers, 334 pages, 16 plates and 26 figures.....	\$1 40	\$2 00
Volume II, 1890: 5 numbers, 344 pages, 10 plates and 11 figures.....	1 40	2 00
Volume III, 1891: 5 brochures, 296 pages, 21 plates and 8 figures.....	1 60	3 00
Volume IV, 1892: Comprising—		
The Evolution of Commerce; Annual Address by the President, Gardiner G. Hubbard: pp. 1-18, March 26, 1892.....	\$0 10	\$0 25
Studies of Muir Glacier, Alaska; by Harry Fielding Reid: pp. 19-84, pls. 1-16, March 21, 1892..	75	1 00
Geography of the Air; Annual Report by Vice-President General A. W. Greely: pp. 85-100, March 18, 1892.....	10	25
The Mother Maps of the United States; by Henry Gannett: pp. 101-116, pl. 17, March 31, 1892...	15	25
An Expedition through the Yukon District; by C. Willard Hayes: pp. 117-162, pls. 18-20, May 15, 1892.....	30	50
Magazine brochure, pp. 163-208, February 8, 1893.	20	50
Administrative brochure, pp. 209-213, i-xxiv, February 20, 1893.....	15	25
	<hr/> \$1 75	<hr/> \$3 00

IRREGULAR PUBLICATIONS

In the interests of exact bibliography, the Society takes cognizance of all publications issued either wholly or partly under its auspices. Each author of a memoir published in THE NATIONAL GEOGRAPHIC MAGAZINE receives 25 copies, and is authorized to order any number of additional copies at a slight advance on the cost of press-work and paper: and these separate brochures are identical with those of the regular edition issued by the Society. Contributors to the magazine brochures are authorized to order any number of copies of their contributions at a slight advance on cost of press-work and paper, provided these separates bear the original pagination and a printed reference to the serial and volume from which they are extracted; but such separates are bibliographically distinct from the brochures issued by the Society. The *Magazine* is not copyrighted, and articles may be reprinted freely; and a record of reprints, so far as known, is kept.

The following separates and reprints from volume iv have been issued:

Edition uniform with the Brochures of the Magazine

Pages	1-18:	125 copies, March 26, 1892.
"	19-84, plates 1-16:	500 " " 21, "
"	85-100,	125 " " 18, "
"	101-116, plate 17:	25 " " 31, "
"	117-162, plates 18-20:	225 " May 15, "

Special Editions

Pages	163-176:	50 copies, without covers, February 10, 1893.
"	189-197: 25 "	" " " " " "
"	198-200: 25 "	" " " " " "
"	201-202: 25 "	" " " " " "
"	v: 1,500 "	" " " " 17, "

Reprints

Pages	56-62, plate 16:	50 copies, with covers, March 30, 1892.
"	56-74, " 16: 100 "	" " " " " "

FOURTH ANNUAL REPORT OF THE SECRETARIES

(Presented to the Society December 23, 1891)

Membership.—The Society was organized in January, 1888, with a membership of 165. At the end of the first year the membership was 209; of the second, 228; of the third, 392, and at the end of this, its fourth year, the membership is 430.

Since the last annual meeting the membership has been increased by the election of 78 new members. It has been decreased by the resignation of 11 members; by the death of 3 members; by the failure to qualify of 14 members; by declining membership 8, and by the dropping of members for non-payment of dues 4. There has thus been a net increase of 38 members, and the present membership is 430, as above stated.

The deceased members were Mr Z. T. Carpenter, Hon William Windom, and Mr A. E. Woodward.

The membership is classified as follows:

Active.....	333
Corresponding.....	92
Life.....	5
Total.....	430

Meetings.—The Society has held 25 meetings during the year, of which 11 were for the reading and discussion of papers; 11 were free public lectures; one was a public lecture at which an admission fee was charged; one was a field meeting at Shendun, Virginia, June 3 and 4, and one was the annual business meeting. Of these, 15 were regular and 10 were special meetings.

Board of Managers.—The Board of Managers has held 17 meetings for the transaction of the business of the Society. The average attendance was 9; the largest attendance of the 17 members composing the board being 13, and the smallest 4.

There is one vacancy in the board, caused by the resignation of Captain Rogers Birnie, Junior, on May 15.

Explorations.—The work of exploration in Alaska begun last year was continued during the present one. Funds for the pur-

pose were provided, as last year, in part by private subscription, in part by payment from the treasury of the Society, and in part by the United States Geological survey. Material aid was also kindly furnished by the Revenue Marine bureau of the Treasury department and by the Navy department in transporting the party from Puget sound to Alaska and return.

The exploration was led by Mr I. C. Russell, geologist, of the United States Geological survey, who with six men left Port Townsend May 30 on the United States revenue steamer *Bear*, Captain M. A. Healy commanding, and reached Icy bay, Alaska, June 6. A distressing accident occurred at the very beginning of the exploratory work. When landing in the surf at Icy bay, three boats were capsized, resulting in the drowning of six persons, viz, Lieutenant L. L. Robinson, Cockswain James Hassler, and seamen T. F. Anderson, Archibald Nelson and Henry Smith, and Will C. Moore, a member of Mr Russell's party.

This mournful accident did not, however, as it might easily have done, defeat the plans for the summer's work. After landing, the party at once proceeded on its difficult way across the broken ice of the Malaspina and Agassiz glaciers toward mount Saint Elias, and established a permanent camp at an elevation of about 8,000 feet. From this permanent camp a climb of about 6,500 feet more toward the summit was made, when they were driven back by storms. Stormy weather continued for 12 days, when it was decided to be unwise to wait longer merely for the purpose of scaling the summit. Reluctantly, therefore, the party returned to Icy bay, measured a base line about three miles long, and determined the altitude of mount Saint Elias by vertical angles taken from each end of the base line, the resulting height being 18,100 feet. This work completed, the party proceeded southward and eastward along the border of Malaspina glacier to Disenchantment bay, studying and photographing the peculiar phenomena there exhibited. Entering Disenchantment bay and proceeding toward its head, a large and hitherto unknown arm of the sea was discovered lying east of and parallel to the eastern shore of Yakutat bay. On October 8, the work of the season having been completed, the party was taken on board the United States steamer *Pinta*, Lieutenant-Commander Washburn Maynard commanding, transported to Sitka, and thence returned by mail steamer to Port Townsend.

The results of the season's exploration are believed to be valuable and important, and will be published the coming year in the National Geographic Magazine.

Publications.—During the year volume ii of the National Geographic Magazine was completed by the publication of number 5, consisting chiefly of administrative matter, together with title pages, indexes, etc., of both volumes i and ii.

The form of publication was changed early in the present year. The new rules adopted February 6 are printed on pages 311-314 of volume ii of the magazine. The general effect of the change instituted by these rules is to substitute for a publication at stated intervals, a publication of single papers or memoirs at irregular intervals, as offered and accepted for publication. Under this new mode of publication 204 pages of volume iii of the National Geographic Magazine have been published and distributed. The principal part of volume iii so far published consists of Mr Russell's report on the exploration of the mount Saint Elias region in 1890.

MARCUS BAKER,
C. A. KENASTON,
Secretaries.

FOURTH ANNUAL REPORT OF THE TREASURER

*(Presented to the Society December 23, 1891)**To the President and Members of the National Geographic Society :*

I have the honor to submit herewith my annual report, showing receipts and disbursements for the year ending December 23, 1891.

The receipts for dues for 1891 amount to \$1,460, showing an increase over the receipts for 1890 of \$171.

The assets of the Society are—

Note of M. N. Thompson, secured by deed of trust...	\$750 00
Cash with Bell & Co.....	36 39
Dues for 1891, unpaid	214 00
	<hr/>
	\$1,000 39

The liabilities are—

Balance due on note of Bell & Co.	\$500 00
Interest on above note to date.....	22 50
Outstanding bills, not yet presented (about)	80 00
	<hr/>
	\$602 50

C. J. BELL,
Treasurer.

Report of the Treasurer.

xi

Dr.		Cr.	
THE TREASURER in account with THE NATIONAL GEOGRAPHIC SOCIETY.			
1891.		1891.	
Dec. 23.	To balance on hand Dec. 26, 1890.....	\$41 62	Preparation of report, mount St Elias expedition, 1890.....
	Cash received for dues: 1889.. 5 00		Publication of the magazine.....
	" " " 1890.. 146 00		Expenses of meetings and lecture...
	" " " 1891.. 1,460 00		Rent of Cosmos Club hall.....
	" " " 1892.. 30 00		Clerical assistance to the secretary and treasurer.....
	" " " life membership..... 50 00		Subscription to mount St Elias expedition.....
		1,691 00	Bell & Co., on account of note.....
	Proceeds from lecture.....	141 00	Sundries, including postage, freight, stationery, joint directory, &c.....
	Interest on loan.....	45 00	Balance on hand (on deposit with Bell & Co)
	Subscriptions to mount St Elias expedition.....	85 50	
	Loan from Bell & Co.....	750 00	
	Subscription to the publication fund....	100 00	
		\$2,854 12	\$2,854 12

WASHINGTON, D. C., December 23, 1891.

C. J. BELL, Treasurer.

REPORT OF THE AUDITING COMMITTEE

(Presented to the Society January 8, 1892)

To the President and Members of the National Geographic Society:

We, a committee appointed at the annual meeting of the Society to audit the accounts of the Treasurer for the year ending December 23, 1891, beg to submit the following report:

The statement of the receipts, consisting of dues from members, receipts from lecture, interest on loan and subscriptions to the exploration fund, has been examined and found correct.

The vouchers for expenditures and checks in payment thereof have been examined, compared and found correct.

We have examined the bank book, showing the account with Messrs Bell & Co, and found the balance to be \$36.39, as reported.

P. H. CHRISTIE,
E. E. HASKELL,
MIDDLETON SMITH,
Committee.

PROCEEDINGS
OF THE
NATIONAL GEOGRAPHIC SOCIETY
(*Abstract of Minutes*)

January 22, 1892.

61st meeting.

Meeting held in the Assembly Hall of the Cosmos Club. Mr G. K. Gilbert in the chair.

On motion it was voted that the amendment to the By-laws proposed December 23, 1891, be adopted, viz: In article iv, instead of five vice-presidents read "six vice-presidents," and insert at the end of the list of departments of geographic science, after geographic art, the words "commercial geography."

The vice-presidents delivered their annual reports.

Mr Ogden, for the department of the geography of the land, spoke of the progress made in methods of geodetic work.

Mr Hayden, for the department of geography of the sea, spoke on the subject of "Transatlantic steam lanes," exhibiting three charts showing the changes in position of these lanes.

General Greely's report, on the geography of the air, was read by title. *Printed in this volume, pages 85-100.*

Mr Gannett, for the department of geographic art, read a paper on "Mother maps of the United States," illustrating his statements by a large map showing diagrammatically the value for mapping purposes, of the various surveys in the United States. *Printed in this volume, pages 101-116, plate 17.*

January 29, 1892.

Special meeting.

Meeting held in the Lecture Hall of Columbian University. Vice-President Hayden in the chair. Attendance, 400.

Professor C. A. Kenaston read a paper on "The Bryant Expedition to Grand Falls, Labrador," and at the conclusion showed a number of lantern slides made from photographs taken during the course of the expedition.

*February 5 1892.**62d meeting.*

Meeting held in the Assembly Hall of the Cosmos Club. Mr G. K. Gilbert in the chair. Attendance, 80.

The following amendment to the By-laws was proposed: In article III, last paragraph, strike out all words following "nominations for membership," etc, so that the paragraph shall read "The election of members shall be intrusted to the Board of Managers."

Dr C. Willard Hayes read a paper on "A new track in Alaska," describing a new route pursued by the Schwatka party, of which he was a member, in the explorations of last year, and illustrating the relative positions by a large wall map. *Printed in this volume, pages 117-162, plates 18-20.*

*February 12, 1892.**Special meeting.*

Meeting held in the Lecture Hall of Columbian University. Vice-President Ogden in the chair. Attendance, 200.

Professor Charles Sprague Smith delivered a lecture on "Ice-land," illustrating his subject by lantern slides showing views in portions of the island and various objects of interest in connection with its history.

*February 19, 1892.**63d meeting.*

Meeting held in the Lecture Hall of Columbian University. President Hubbard in the chair. Attendance, 200.

Mr Lysander Dickerman read a paper on "Art and architecture of the ancient Egyptians," exhibiting on the screen a large number of photographs of ancient temples and pyramids.

*February 24, 1892.**Special meeting.*

A social meeting was held at Wormley's hotel from 9 to 12 p m for the purpose of bringing the members together for mutual acquaintance. Attendance, 220.

*February, 26, 1892.**Special meeting.*

Meeting held in the Lecture Hall of the National Museum. Attendance, 150.

Mr Gilbert Thompson read a paper on "Military surveying during the Civil War," and was followed by Major Jed. Hotchkiss, who graphically described the map-making operations of the topographers of the Confederate army, showing at the same time numerous original maps of historical value.

March 4, 1892.

64th meeting.

Meeting held in the Assembly Hall of the Cosmos Club. Vice-President Hayden in the chair. Attendance, 150.

By vote of the Society the following amendment to the By-laws was adopted: In article III, last paragraph, strike out all words following "Nominations for membership," etc, so that the paragraph shall read: "The election of members shall be intrusted to the Board of Managers."

The subject of the evening, the "Alaskan Boundary Survey," was introduced by Dr T. C. Mendenhall, who was followed by Mr John E. McGrath and Mr J. Henry Turner. The papers were illustrated by lantern slides. Remarks were afterward made by Dr George M. Dawson. *Printed in this volume, pp. 177-197.*

March 11, 1892.

Special meeting.

Meeting held in the Universalist church. President Hubbard in the chair. Attendance, 350.

Mr Joseph Stanley-Brown delivered an address on "The Seal islands of Alaska," illustrated by pictures of the islands.

March 18, 1892.

65th meeting.

Meeting held in the Lecture Hall of the National Museum. Vice-President Ogden in the chair. Attendance, 250.

Mr G. K. Gilbert read a paper on "Coon butte and the canyon Diablo meteorites." A number of lantern slides were exhibited, illustrating the topography and geology of the area, and two large meteorites were also shown.

March 25, 1892.

Special meeting.

Meeting held in the Lecture Hall of the National Museum. Mr G. K. Gilbert in the chair. Attendance, 305.

Dr W. A. Croffut gave a sketch of a trip through Greece and Palestine, describing in particular the city of Jerusalem and the church of the Holy Sepulchre, illustrating his remarks by lantern slides.

April 1, 1892.

66th meeting.

Meeting held in the Lecture Hall of the National Museum.

Professor Leslie A. Lee, of Bowdoin College, gave an illustrated lecture on the "Cruise of the *Albatross* through the Straits of Magellan."

*April 8, 1892.**Special meeting.*

Meeting held in the Lecture Hall of the National Museum. Vice-President Hayden in the chair. Attendance, 375.

Lieutenant C. H. Harlow, U S N, gave a description of a trip through Bolivia, illustrating his topic by lantern slide views taken at various points in the country.

*April 15, 1892.**67th meeting.*

Meeting held in the Lecture Hall of the National Museum. Attendance, 435.

Mr W. H. Holmes, of the Bureau of Ethnology, gave an illustrated lecture on the "Cliff Dwellers." At the close of the lecture remarks were made by Major J. W. Powell.

*April 22, 1892.**Special meeting.*

Meeting held in the Lecture Hall of the National Museum. President Hubbard in the chair. Attendance, 400.

Dr John Murray, F R S E, gave a description of the cruise of the *Challenger* and summed up some of the results of the investigation of the ocean bottom. The descriptions of the deep-sea mud and ooze were profusely illustrated by lantern slides.

*April 29, 1892.**68th meeting.*

Meeting held in the Assembly Hall of the Cosmos Club. Vice-President Hayden in the chair. Attendance, 100.

Lieutenant S. W. B. Diehl, U S N, gave a lecture on "The compensation of the compass on board iron ships," illustrating his remarks by diagrams, and exhibiting a ship's binnacle together with the various magnets and other apparatus employed.

Professor Cleveland Abbe spoke briefly on terrestrial magnetism.

*May 6, 1892.**Special meeting.*

Meeting held in the Lecture Hall of the National Museum. Vice-President Hayden in the chair. Attendance, 268.

Reverend Professor John P. Peters delivered a lecture on "Mesopotamia," describing the country and his experience there during his two seasons' work of excavation. A large number of lantern slides were shown.

May 13, 1892.

69th meeting.

Meeting held in the Lecture Hall of the National Museum. Vice-President Hayden in the chair. Attendance, 307.

Mr Talcott Williams delivered an address on "The gates and straits of Europe," describing the influence of the surface configuration on the development of civilization.

May 20, 1892.

Special meeting.

Meeting held in the Builders' Exchange Hall. President Hubbard in the chair. Attendance, 700.

Mrs M. French-Sheldon gave a description of her journey in Africa, illustrating her remarks with lantern slides made from photographs taken on the trip.

May 27, 1892.

Field meeting.

About 75 members left Washington for Annapolis, where they were received by the secretary of state of Maryland and welcomed on behalf of Governor Brown, who was detained at Baltimore. The historic State House was first visited, and, after dinner, the Chase mansion. Proceeding then to the Naval Academy, the members were, through the kindness of Superintendent Pythian and Commandant Chester, transferred to the cruiser *Philadelphia*, which, with other vessels of the squadron, was anchored in the bay. Returning to the grounds, the party was enabled to witness dress parade. After supper the Society, through the courtesy of the Governor, held a meeting in the House of Delegates, addresses being made by Messrs Gilbert, McGee, D. J. Randall, and W. J. Hull, the two gentlemen last named giving incidents of the history of the place. Following this was an original poem by Mr Croffut. On motion of Reverend Gilbert F. Williams, it was voted "That the thanks of this Society be extended to the governor of the state of Maryland for his courteous tendering of this room for the meeting of the Society and for the privilege of entrance to every part of this historic building; that our thanks be also extended to the superintendent of the Naval Academy and to Captain C. M. Chester, U S N, for giving the Society the opportunity of visiting one of the new cruisers of the navy and also for the special parade at the academy; also to the lady managers of the old Chase mansion for the opportunity of inspecting that building, and to

Messrs Randall and Hull for the interesting narratives of incidents of local history." At the close of the meeting the Society returned to Washington.

November 11, 1892.

70th meeting.

Meeting held in the Assembly Hall of the Cosmos Club. President Hubbard in the chair. Attendance, 25.

In the absence of the Secretary, Mr Baker was elected Secretary *pro tempore*.

The evening was devoted to a consideration of the program of exercises for this session. The President announced it as thus far drafted, and invited suggestions. It was generally understood that the program should consist of a series of popular lectures, alternating with meetings to be held at the Cosmos Club Hall, of somewhat more informal character and devoted to short or technical papers, with discussions.

November 25, 1892.

71st meeting.

Meeting held in the Assembly Hall of the Cosmos Club. Vice-President Greely in the chair. Attendance, 40.

Mr W J McGee gave an address on "Geographic changes produced by earthquakes," describing phenomena observed within the area of the New Madrid earthquake of 1811 to 1813.

December 2, 1892.

Special meeting.

Meeting held in the Universalist Church. Vice-President Greely in the chair. Attendance, 500.

Miss Annie S. Peck, of Providence, Rhode Island, delivered an illustrated lecture on "Athens, the modern city of Greece."

December 9, 1892.

72d meeting.

Meeting held in the Assembly Hall of the Cosmos Club. Vice-President Greely in the chair. Attendance, 80.

Mr Henry Gannett, Geographer of the Eleventh Census, read a paper on "Movement of population in the United States," illustrated by about 40 charts. The paper was discussed by Messrs Ogden, Baker, Gilbert, Thompson, Johnson and Greely. *To be printed in volume V.*

December 16, 1892.

Special meeting.

Meeting held in the Builders' Exchange Hall. Vice-President Greely in the chair. Attendance, 400.

Mr Romyn Hitchcock read a paper on "China," especial reference being made to a trip from Shanghai to Pekin. The lecture was illustrated by a number of stereopticon views made from photographs taken on the trip, including a number showing the great wall of China.

December 23, 1892.

73d (5th annual) meeting.

Meeting held in the Assembly Hall of the Cosmos Club. President Hubbard in the chair. Attendance, 40.

Professor W. B. Powell, Superintendent of Public Schools, read a paper on "Methods of teaching geography in the Schools." The paper was discussed by General Greely and Dr Mendenhall.

After a recess the 5th annual meeting convened.

The joint report of the Secretaries was presented and adopted.

The annual report of the Treasurer was presented and referred to an auditing committee consisting of Messrs Winston and Wainwright and Dr Anita Newcomb McGee.

The annual election of officers for the year 1893 was then held, with the following result:

President—Gardiner G. Hubbard.

Vice-Presidents—H. G. Ogden (land);

Everett Hayden (sea);

A. W. Greely (air);

C. Hart Merriam (life);

Henry Gannett (art);

R. N. Batchelder (commercial geography).

Treasurer—C. J. Bell.

Recording Secretary—F. H. Newell.

Corresponding Secretary—Eliza Ruhamah Seidmore.

Managers—Marcus Baker,

H. F. Blount,

G. K. Gilbert,

John Hyde,

W J McGee,

T. C. Mendenhall,

W. B. Powell,

Edwin Willits.

FIFTH ANNUAL REPORT OF THE SECRETARIES

(Presented to the Society December 23, 1892)

Membership.—The membership of the Society is now 693. It is continuing to increase, and by the coöperation of all interested should, it is to be hoped, soon reach 1,000. The rate of progress is shown by the following figures.

At the end of the first year, 1888, the membership was 209; at the end of 1889 it was 228, an increase of 9 per cent; at the end of 1890 it was 392, an increase during the year of 72 per cent; at the end of 1891 it was 430, an increase of 10 per cent, and at the end of 1892 it is 693, or an increase of 61 per cent.

Classifying the membership, it is found that there are 478 active, 208 corresponding, and 7 life members. Taking the active members alone, the total number at the end of 1890 was 331; at the end of 1891, 333, an increase of 2 only, and at the end of 1892, 478, an increase of over 40 per cent. The greatest relative gain is in the corresponding membership, the number increasing from 57 in 1890 to 92 in 1891 and to 208 in 1892, a gain in the last year of over 100 per cent.

It may be well to note at this point that the corresponding members, being non-resident, are not able to take advantage directly of the meetings of the Society, and that their interest in the organization is sustained mainly by the publications. Continual addition to the membership of this class, therefore, must necessitate greater attention to the demands of readers of geographic literature.

During the year 323 members have been elected, 23 members have resigned, 5 died, 6 declined membership, 13 failed to qualify, and 13 have been dropped for non-payment of dues. The net increase thus has been 263, and the present total membership is 693, as stated above. The deceased members were: E. J. Pond, January 23, 1892; Dr J. H. Chapin, March 14, 1892; Professor John Goodison, October 19, 1892; Lieutenant Frederick Schwatka, November 2, 1892 and Captain John M. Dow, November 4, 1892.

Meetings.—There have been 30 meetings or assemblies of the members of the Society. Of these 14 were regular meetings and

16 special. The latter number includes one social at Wormley's hotel on February 24, a field meeting at Annapolis, Maryland, on May 27, and also the lawn party at Twin Oaks, where by invitation of the President fully 300 members and guests were handsomely entertained.

One of the regular meetings was for the election of officers and transaction of business. The remaining 26 meetings, regular and special, were devoted mainly to lectures or reading of papers, and the average attendance was 242. On 15 evenings the lectures or papers were illustrated by use of the stereopticon, and on these evenings the attendance averaged 316. When lantern slides were not used the average attendance was 131, or less than half.

There has been no regularity in regard to place of meeting. The hall of the Cosmos club has been used 9 times, there being an average of 85 members and guests present; the hall of Columbian University 4 times, the audience averaging 225 persons; the National Museum lecture-room 10 times, averaging 290 persons, and other halls or churches 4 times, averaging 500 persons.

The subjects under discussion by the various speakers have been widely diverse, embracing nearly every quarter of the globe. Greatest attention has been paid to northern regions, 6 evenings being devoted to Alaska, Greenland, Iceland, Labrador, etc.

Managers.—The Board of Managers have held 18 meetings for the transaction of business of the Society. Of these 15 were regular and 3 special. The highest attendance of the 17 members was 15, and the average was about 9.

No explorations have been attempted, but the efforts of the managers have been directed toward strengthening the Society in every way.

A change in the By-laws was adopted March 4, 1892, by which the election of new members was greatly facilitated, being left more directly in the hands of the Board of Managers. A new office, that of Vice-President of commercial geography, was created at the beginning of the year, but as yet remains unfilled.

Publications.—During the year six brochures have been published, one of these forming the last number of volume iii and five the larger portion of volume iv of the magazine.

F. H. NEWELL,
ELIZA R. SCIDMORE,
Secretaries.

FIFTH ANNUAL REPORT OF THE TREASURER

(Presented to the Society December 23, 1892)

To the President and Members of the National Geographic Society:

I have the honor to submit herewith my annual report, showing receipts and disbursements for the year ending December 23, 1892.

The receipts for dues for 1892 amount to \$2,165, an increase over the receipts for 1891 of \$705.

The assets of the Society are:

Amount invested in American Security and Trust	
Company 5 per cent bonds.....	\$300 00
Cash with Bell & Company.....	205 31
Dues for 1892, unpaid.....	271 00
	<hr/>
	\$776 31

The liabilities are:

Outstanding bills (about).....	\$215 00
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The cash on hand includes \$50, dues for one life membership, which should be reserved and invested in accordance with instructions received from the Board of Managers.

Very respectfully,

C. J. BELL,
Treasurer.

Report of the Treasurer.

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Dr.	THE TREASURER in account with THE NATIONAL GEOGRAPHIC SOCIETY.		Cr.
1892.			
Dec. 23.	To balance on hand	Dec. 23, 1891.....	\$36 39
	Cash received for dues:	1899..	5 00
	" " "	1890..	32 00
	" " "	1891..	117 00
	" " "	1892..	2,165 00
	" " "	1893..	95 00
	" " " life member- ship.....		50 00
	Subscriptions to publication fund.....		2,464 00
	Note of M. N. Thompson, \$750, and in- terest, \$22.62.....		110 00
	Interest on investment.....		772 62
	Sales of magazine.....		4 43
			423 91
			<hr/>
			\$3,811 35
1892.			
Dec. 23.	By cash paid for—		
	Publication of magazine.....		\$1,019 76
	Expenses of meetings.....		831 63
	Clerical assistance to the Secretary and Treasurer.....		240 00
	Balance of note, Bell & Co, \$500, and interest, \$25.54.....		525 54
	American Security and Trust Com- pany, 5 per cent bonds at par (life membership dues invested).....		300 00
	Deficit on social meeting, \$70.09, and on annual excursion, \$43.47.....		113 56
	Subscription to Robinson relief fund		100 00
	Subscription to Royal Scottish Geo- graphical Magazine.....		73 26
	Sundries, including postage, freight, stationery, joint directory, &c.....		402 29
	Balance on hand (on deposit with Bell & Co)		205 31
			<hr/>
			\$3,811 35

C. J. BELL, *Treasurer.*

WASHINGTON, D. C., December 23, 1892.

REPORT OF THE AUDITING COMMITTEE

(Presented to the Society January 6, 1893)

To the President and Members of the National Geographic Society :

We, a committee appointed at the annual meeting of the Society to audit the accounts of the Treasurer for the year ending December 23, 1892, beg to submit the following report :

The Treasurer's statement of the receipts, consisting of dues from members, interest on investments and sale of magazines, has been examined and found correct, as shown by the books of his office.

The vouchers for expenditures and checks in payment thereof have been examined, compared, and found correct.

We have examined the bank book, showing the account with Messrs Bell and Co, and found the cash balance to be two hundred and five and thirty-one hundredths dollars (\$205.31), as stated.

The three bonds for \$100 each, registered in the name of the Society, were submitted to us for inspection.

ISAAC WINSTON,

D. B. WAINWRIGHT,

ANITA NEWCOMB MCGEE, M D,

Committee.

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